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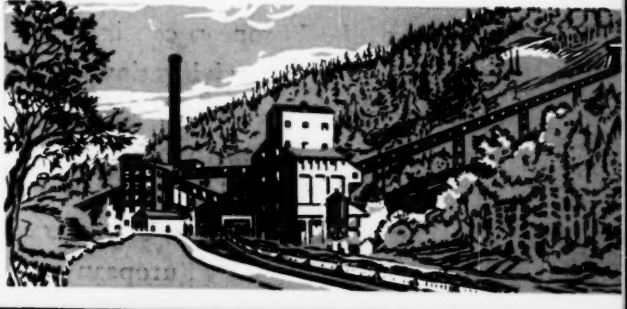

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Dr. Vent is Professor of Social Studies, Mississippi State College. He was trained at the University of Oregon and Stanford University. He has written articles for education in the *NEA Journal* as well as the JOURNAL OF GEOGRAPHY.

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SOME POPULATION TRENDS IN MISSISSIPPI

HERBERT VENT
Mississippi State College

Until 1940 slightly more than half of the population of Mississippi was non-white. At the same time it was also largely a rural population. However, with the 1940 census Mississippi was shown for the first time to have a greater than 50 per cent white population. It was then 50.7 per cent white. During the next 10 years there were pronounced changes in the white–non-white ratio and in the urban-rural trends. In 1950 fifty-four and six-tenths per cent of the population was white. The trend toward urbanization is made startlingly clear by the fact that 27 of the 28 towns of more than 5,000 population gained during the decade while the state as a whole had a population loss of two-tenths of one per cent.

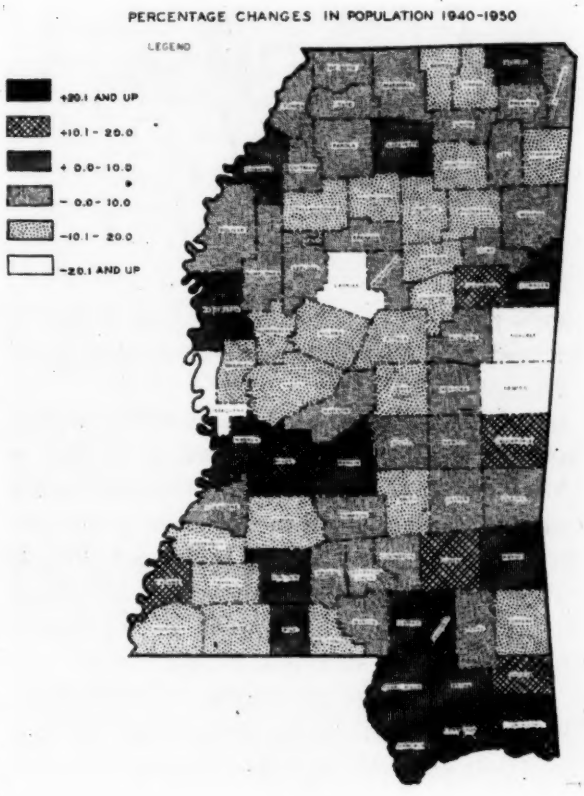

FIG. 1

During the 1940-1950 period 59 of the 82 counties in the

FIG. 2

state lost population (Fig. 1). That loss was confined for the most part to the northern counties (Fig. 1).

There are 31 counties in the state with a greater than 50 per cent non-white population (Fig. 3). Twenty-eight of those counties lost population in the decade. In more than 90 per cent of the predominantly non-white counties, then, there was a population decline between 1940-1950. Only 61 per cent of the predominantly white counties had a decline. Also, it is noted that all four counties decreasing by 20 or more per cent had a non-white majority, whereas all nine counties increasing by 10 or more per cent had a white population majority (Figs. 1 and 3).

It is apparent that the non-white population is definitely declining, while the white population is just as definitely increasing. Further examination of the 1950 population census reveals that the non-whites decreased in numbers by 8.1 per cent during the period the whites were increasing by 7.4 per cent. The positive and negative values of percentage changes now nearly cancel because of a difference in the absolute numbers of the two racial groups giving the state an almost stationary population.

Seventeen of the 23 counties which had a population gain between 1940-1950 are within the group comprising the 36 southern counties. Only 6 of 46 in the northern part of the state gained (Fig. 1).

The northern and northwestern cotton growing counties (Fig. 2)

with few exceptions lost population(Fig. 1). Since the loss state-wide has been among the non-whites, it is assumed that the loss in the cotton district is among the non-whites, too. Altho it is not the intent of this article to thoroly analyze the reasons for the departure of the colored population from Mississippi, the cotton district in particular, one would be remiss in not pointing out a few of the factors involved. Principally they appear to be mechanization in cotton production, lack of industry within the state to absorb a large rural population in part and prosperity country-wide which tends to draw laborers from among the Mississippi non-whites to a considerable extent.

FIG. 3

The southern part of the state has shown a sufficient population gain to almost offset the decline in the northern part. What the future holds one can only conjecture. However, it appears that the southern counties in general will continue to gain while most of the northern ones will lose population unless the exodus of non-whites finally stabilizes itself.

ORGANIZING A GEOGRAPHY CLUB IN THE SECONDARY SCHOOL

MARY VIOLA PHILLIPS
New Kensington High School, Pa.

ORGANIZING A GEOGRAPHY CLUB IN THE SECONDARY SCHOOL

Since our secondary schools have been growing to the point where they now include the great majority of young people of high school age, their curriculums have been changing to meet the needs and interests of students. A major change in curriculums has been the extension of classroom work into the area of student activities beyond the classroom. The most recent additions to the program of subject-extension activities have been clubs.

Geography, like other subjects taught in a secondary school, offers extensive possibilities and is greatly benefited by a club program. The opportunities and advantages in a geography club are proportionate to the imagination and the enthusiasm of the members and the sponsor. Club programs can feature unusual experiences and demonstrations and bring geography into the spotlight of modern living for the students.

The following questions and answers are pertinent to the establishment and maintenance of a geography club:

1. How does a new club get its start?

A prerequisite of any group organization is interest. If there is a request for a geography club, the teacher may ask for the signatures of those students who would participate in such an activity if it could be provided. He may turn over such a list to the principal or student council for discussion and consideration. A favorable decision from the principal or council would lead to its chartering the club.

A committee may be appointed by the sponsor to designate a place and time for a voluntary group to formulate plans for organizing the Club. The organizational meeting should include all interested persons, and they will become the charter members. At this meeting, the business of drawing up a constitution and necessary by-laws should be discussed. A name for the Club, motto and colors, dues and requirements for membership may also be considered at this time. However, it is in order to appoint a committee to decide these things, with the understanding that the final decision be made by Club members.

2. What are the duties of the sponsor?

The sponsor provides guidance and cooperative supervision and tactfully coordinates the club activities with the whole school program. He interprets to the group the purposes of their organization and helps the members correlate their worth with the policies of the school. He works with the officers and the committee chairmen so that they can underestand and fulfill their responsibilities of leadership.

3. What should be the program of a geography club?

The club should have regular meetings with the customary procedures according to parliamentary law. *Robert's Rules of Order, Revised* should be followed.

4. Should written records be kept?

It is always desirable to have a running account of the acivities of every club. If the club has regular meetings, it will have a secretary who will keep minute books.

5. What about dues?

Minimize dues or omit them entirely, if it is possible. Such expenses serve as a barrier to students who do not have funds for such purposes. It is often better to reserve the collection of funds until the actual need is apparent. It is well to request an assessment at one meeting, waiting until the next meeting before voting on it.

6. Should there be a constitution?

A constitution has many values. The process of drawing up such a document serves to clarify the thinking of the members as to the purposes and procedures of their organization. Devoting a part of the first meeting of each year to reading and discussing the constitution helps to orient new members. Frequent references to it is also beneficial.

7. How should membership be determined?

Membership should be open to all students enrolled in geography classes. There should be available in the school handbook or newspaper a statement of purposes of the club. The daily bulletin, public address system, or whatever news agency the school may use, should announce the time and place of club meetings and invite all geography students to attend.

8. Should new members be initiated?

It is far better to accept students into membership informally or according to a regularly established installation ceremony.

9. How should officers be selected?

Club officers may be selected according to the number desired. Use the standard procedures of written nominations and secret ballot. It is wise to insist that an officer in the Club should have at least a passing standing in all his subjects in order to be certain that he can give adequate time to his position. Suggested officers follow, but it is not necessary to adhere to this list:

President—the presiding officer
Vice President—shall preside in the absence of the president
Recording Secretary—shall keep minutes of the meetings
Corresponding Secretary—shall attend to the correspondence
Treasurer—shall act as custodian of the Club funds
Chaplain—shall conduct the devotional period
Sergeant-at-Arms—shall arrange room for meetings.

10. How should the club be conducted?

The club should function under the student officers who have been elected by popular vote of the members. The officers may be assisted by committees in carrying on the club activities. The following standing committees are also in order and a chairman may be appointed to head each committee:

Membership—shall receive proposals for membership
Program—shall arrange programs and social activities
Publicity—shall publicize Club projects and activities

Publicity is often helpful to both school and community. The following suggestions may be of aid to the publicity committee:

Place notices of meetings and projects on blackboards with colored chalk.

Carry accounts of trips, projects, activities and meetings in the school paper with mention of the work of individual members.

Place posters concerning some phase of Club work in prominent places.

Ask for space in the local paper and contribute a weekly column on specialized Club activities.

11. When should the club meetings be scheduled?

The time and place of meeting should parallel the desires of the sponsor and the members of the Club. Meetings may be conducted during a school activity period or after school, whichever time best fits in with the local situation. In a popular arrangement the business meetings are planned for the school activity period, weekly, biweekly, or monthly and an open meeting, at least once a month, to which interested persons are invited.

12. What are the guiding principles and practices for administering the club activities?

The club activities should promote leadership, initiative and fellowship among the students.

The club activities should provide an opportunity to coordinate home, school and community life and to raise the level of thinking and acting.

The club activities should provide and promote opportunities for students to solve problems and learn democratic procedures and principles.

The club activities should promote interests and skills which carry over into the out-of-school life of the pupil even after he has graduated.

13. What practices should the scheduling of club activities include?

Providing for the needs and interests of all members.

Having a regular time and place for meetings scheduled.

Making provision to avoid over-crowding a group.

Additional groups of the same activity should be formed if necessary.

Securing permission of the administration for all school activities before carrying them out.

Use of school time insofar as is possible.

14. What kind of activities can be developed by the Club?

Invite men or women of the community, who have traveled, to speak. Have a student take notes of the talk. This can be kept for future reference.

Present oral or written reports on current critical issues.

Have an occasional program in which use is made of movies or slides of countries or regions of the world. This program may be in the nature of an illustrated talk.

Publish a bulletin or newsletter and exchange it with other clubs.

Exchange letters with young citizens of other lands.

Arrange for an "open" night meeting occasionally. Plan an interesting program which can be based on some local theme.

Begin a local geography museum by collecting such things as are peculiar to the local community life. All articles should be catalogued.

Present a school assembly for one of the holidays. Example—Pan American Day.

Clip and file or put into record books, newspaper accounts of club activities.

Keep a roll of alumni Club members and addresses. These members can be notified concerning important events within the Club.

Write and present radio programs concerning topics of a geographic nature.

Make group research notebooks on various areas of the world and keep for use in geography classes.

Have an exhibit or display of geographic materials collected and prepared by the geography students; to this exhibit invite all interested people.

Make field trips to local industries or to places of geographical interest. A briefing or explanatory lecture should be given by the sponsor or by some member of the club, before the trip is taken. Related geographical information should be investigated before the trip. Thus students can be prepared to recognize significant data.

Build up a local or state geography library. Valuable material can be acquired from various agencies of the state. When a request for material is made it should come from only one person in the group who can, with the help of the sponsor, indicate the quantity of material needed.

Have members of the Club, who are particularly adept in art or mechanical drawing, prepare maps of the community. The entire membership may help by gathering data and by collecting geographical information.

Assemble various kinds of pictures and mount for class use.

Assemble and file magazine and newspaper articles dealing with geography to be used as references.

If equipment is available make movies or slides of local geographical sites.

Prepare a community survey of population (nationality or ancestry) natural resources, industries, trade, communication, etc.

15. How can the activities of the geography club be evaluated?

The evaluation of an activity is as important as its planning. After a presentation of an event, the officers and sponsors should discuss in detail the merits of the performance. Each committee chairman should prepare a written report with recommendations and suggestions for his successor. These reports should be carefully filed in order that they may serve as the first step in planning the corresponding event in the future. The sponsoring group should be

alert to the comments and criticisms of audiences and other participants. Mistakes are almost inevitable, but such errors may be eliminated by profiting from experience.

MAJOR VALUES OF A GOOD GEOGRAPHY CLUB PROGRAM

1. Thru organized association with fellow students of similar interests, a student has a feeling of acceptance and of successful achievement.
2. Geography club activities vitalize and motivate class work.
3. Leadership is encouraged thru group activities.
4. Good fellowship is a product of group activity. There is an improved tone of human relationships among the group and respect for each other.
5. Participation in club activities makes for a greater understanding of the problems of others, an increased interest in civic affairs and the development of a spirit of unselfish service.
6. The activities of the geography club heighten student morale by adding to the serious business of education the element of fun and the opportunity to create, direct and produce.

When the activities of the geography club are adapted to the needs of the students, to the needs and interests of the school and community and are supervised by a capable and enthusiastic sponsor, the club can be beneficial and should have its rightful place in a well-organized secondary school.

IS IT ESSENTIAL FOR THE AMERICAN STUDENT TO BE GEOGRAPHICALLY INFORMED?

ELIZABETH HOFFMANN
New Rochelle, New York

(This paper won first prize in a state wide contest conducted by the New Jersey Council of Geography Teachers in the spring of 1953. The author is Miss Elizabeth Hoffmann, then a senior in Mt. St. Domonic Academy, Caldwell, New Jersey.)

Geography, according to Webster is "the science that deals with the surface of the earth, its natural divisions, mountain ranges, rivers, climatic conditions, plant and animal life, agriculture and commerce; the natural features of a specific area."

Is it essential for the American Student to be geographically informed? Let us point out the values of geography—the essential values! Geography is education for survival. "The fate of civilization, even the survival of mankind itself rests upon the race between education and catastrophe."[1] Why? The world today poses two main problems: 1. the need of enough knowledge about the environment of the earth to enable man to make successful adjustment to the forces and resources of nature; and 2. the necessity of learning enough about other peoples to enable one people to get along with the others. This second problem requires sufficient learning to make the attitudes and actions of other peoples seem reasonable and understandable. It must be remembered that characteristic attitudes and actions of human beings look reasonable only "when viewed against the background of their unique environment and in the light of the problems emerging out of their relation to their environment."[2]

The time to acquire this knowledge is during school years and those to whom this training should be given are the American students. America may build a system of education which tells the *child* to be tolerant and understanding of others but when the *man* faces other men with views and cultures different from his own, other men whose definition of familiar terms is not even the same as his own, he is not going to be understanding. When a man finds them competing for things he wants himself he is not going to be tolerant, even if he has been told to. But even tolerance and understanding are not enough. Man must like his fellowmen well enough not to fight with them.

Thus on two accounts logic demands that education today include geography, the study of the relations of peoples to their environment and a consideration of the spatial patterns of living which mankind has evolved. It is strange that while space, thru speed, is being annihilated and interest in international relations is increasing, that geography, a subject which would contribute so much to the understanding of world problems is being neglected.

No one seems to question the necessity of history in the American system of education. And yet it has been said that "history without geography is a romance in the land of nowhere."[3]

[1] "Geography Education for Survival." *School and Society*. 1949. 70, 81-86.

[2] *Ibid.*

[3] Ostheimer, Smith. *Christianity And America*. New York, Sadlier Inc. Chicago, 1948.

An intelligent study of history demands that the student know, at least in a general way, the places which he is studying. It is true that the geographic factors do not completely determine the development of human society, but they do have a very great conditioning influence.

Due to the changing world we now have "new geography" in which distance is equal to speed rather than miles; the study of air is just as necessary as the study of land and sea. It must also be remembered that the basic factors of peoples are just the same and just as important even though the boundaries have been changed or destroyed. Geography is the strategy of men, space and resources in a world of motion. Current events move different places into the spotlight—places like the Aleutian Islands, Korea, Iran, Palestine. It is therefore necessary, today, to possess a great knowledge of geography in order to intelligently read a newspaper, listen to a newscast or simply carry on an intelligent conversation on world affairs.

Let us also look at the essential value of geography in both war-time and in peace-time. The lack of geographical knowledge has been the cause of much war-time embarrassment. General George Marshall said concerning this subject: "... the nation whose leaders know the most and the best geography are going to win this war." When the army made arrangements with colleges and universities to give special courses to hundreds of thousands of young men in military service many colleges and universities discovered that they had no geography professors on the faculty. If, however, there had been courses in geography in American high schools, colleges and universities in the first place, there would have been no lack of geography professors nor would there have been any necessity of added military geographical courses to make up for the deficiency in knowledge. Not only is this knowledge essential for actual fighting on foreign soil. It is also very necessary for mutual understanding, for war demands the cooperation of different creeds, colors and cultures thruout the world.

The value of geography to a nation at peace is even greater. After winning World War I we lost our peace during 1919-1939 because as a nation we did not know enough geography to take steps necessary to save it. Our outline of our foreign policy indicated a geographical immaturity and at times a completely fanciful concept of the world at the time. It is also more important to

have mutual cooperation among nations during an era of peace for this is the factor which makes peace possible.

Since geography is essential the question arises—*are* our American students geographically informed? According to the New York *Times* geographic survey which was given to 4,752 students in colleges and universities representing a good cross-section of the nation's college students, we may safely say that the nation is lacking in fundamental geography. This test showed that less than one-half of the students know even the approximate size of the United States. Canada is our neighbor but 98 per cent of those quizzed had no notion of its population. Only 17 per cent could name the states thru which one would pass traveling by the most direct route between Minneapolis and Seattle. Some even named Georgia, Mississippi and other distant states. Only 5 per cent could list the states bordering on the Atlantic Coast.

The knowledge of beyond our own borders was even less. Few students could name even one state touching Yugoslavia. Among the named countries were Belgium, Egypt, Manchuria or Portugal. One student even named Canada.

A previous *Times* study revealed that less than 5 per cent of the nation's college students were taking even one geography course. Some educators hold that geography is not needed on the college level, asserting that high school education does enough, but wild guesses made by college students on these tests indicates that there is a serious deficiency in their education. According to Nicholas M. Butler—"America is the best half-educated nation in the world."

Geography, which has an important place in the program of grade school and in which contributions have been made at the more advanced levels of education, has disappeared almost completely from the curriculum of secondary schools. This is rather suprising when one considers that geography is a bridge between science and the humanities. There is a misconception that regards geography as a physical study rather than a "man and environment" science.

If there were ever a time when geography played an important role, that time is now. The U. N. Social and Economic Division offers "a green light" and is encouraging geographical advances in study and research as never before. The interdependence of the world for raw materials and for the distribution of manufactured

goods has become a commonplace idea. This fact increases our need for international understanding.

To place the whole of geographical instruction in elementary schools, regardless of how good the text books may be, only offers a knowledge which will be lost before it can be put into use. Geography is a subject needed by adults in their dealings and relationships of their everyday life. And yet, as our system of education is today after the completion of the elementary grades, geography can be found only buried in the amalgam called social studies in high schools and only in special courses in colleges and universities. Geography is a forgotten subject in colleges for either of two reasons—either because it is not considered as important or else because college students feel they have acquired the necessary knowledge in elementary and secondary schools.

There is a difference between possessing a geographic viewpoint and possessing a fund of geographic knowledge. Recent war if it has taught anything has taught that geography education is a "must." World peace is the best bargain we can purchase. It would be better to reorient our educational system than to leave it as it is, for should there be a third global war we will need to know all the economic and military geography possible in order to have a fair chance of winning. We must have the same knowledge to maintain peace when it is won. Perhaps geography will find its way back into our college curriculum as the younger generation is inspired by brothers and sisters in the Armed Services who saw the world, to share their experiences by study if not by actual travel. We live in and will continue to live in a geographical world. To be good world citizens we must understand how to live in such a world. This requires a complete geography education. American college students are the young citizens of today and the world leaders of tomorrow. It is essential for them to be geographically informed.

Have you made your reservation in San Francisco?

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in

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NOTES ON THE PLANETARY-WIND DIAGRAM

J. Ross Mackay
University of British Columbia

The familiar planetary-wind diagram with its trade winds, westerlies and other belts occupies a firm place in many geography curriculums. It is frequently used as a frame of reference in climatology, meteorology, oceanography and other disciplines. Despite its popularity, the diagram can be severely criticized on several grounds, and it is clearly inadequate in many respects. Objections to it have been forcefully presented by a recent writer who has expressed the view that it is "both false and useless" and so should be discarded as "deadwood."[1]

It seems quite possible that sooner or later the planetary-wind diagram will be radically altered or relegated to limbo along with other discredited theories. The purpose of the following notes on the diagram is not to prolong and sustain its life, but to call attention to the bands of Jupiter and to the phenomenon of the jet stream, both of which may be used as aids in teaching the planetary-wind diagram.

Jupiter's Banded Atmosphere

Any person familiar with the planetary-wind diagram can hardly fail to be impressed with its striking resemblance to the belted arrangement of Jupiter's atmosphere which shows with remarkable clarity on large scale photographs of the planet. The analogy between the patterns on Jupiter and the planetary-wind system for our earth must not be pushed too far, because the two planets have greatly differing physical conditions. Nevertheless, since we cannot observe our own atmosphere from outer space it is of considerable interest to note the similarity between the banded arrangement of Jupiter's atmosphere and the theoretical pattern which it is assumed our own earth would have if its surface were homogeneous. As one astronomer has expressed it: "The bright *equatorial zone* [of Jupiter] extends some 10° on each side of the equator, having a maximum width of 15,000 miles. It is bordered by the dark *north and south equatorial belts,* the most conspicuous of the belts. Beyond them are the bright *north and south tropical zones;* then come

[1] Erhard Rostlund, "The Persistent Planetary-Wind Diagram," Journal of Geography, Vol. LI (1952), pp. 285-292. Quotations on pp. 291 and 292.

the less conspicuous temperate belts and zones, and finally the polar regions."[2] Or again: "Since the axis of rotation [of Jupiter] is perpendicular to the plane of the slowly changing bands, the bands must result from great 'trade winds' or atmospheric currents parallel to the equator. The atmosphere must be deep, so that the rapid rotation can preserve these currents, perhaps in some fashion similar to the maintenance of the trade winds in our own atmosphere."[3]

FIG. 1. Photograph of Planet Jupiter showing the cloud belts and the great red spot. Photographed with the 60-inch reflector at Mount Wilson August 20, 1927, by Ross. Reproduced by permission of The University of Chicago Press.

Large scale photographs of Jupiter with its bands can be purchased as prints, transparencies or slides.[4]

The photographs not only illustrate the planetary-wind diagram which admittedly may be lacking in glamour, but are also of interest in themselves.

THE JET STREAM

During the past few years considerable publicity has been given to the jet stream, those narrow streamers of air moving at high velocity at altitudes of two to eight miles above the surface of the earth. The existence of the jet stream was not suspected before B-29s engaged in bombing raids of Japan "discovered" them. "The jet stream . . . is not an occasional atmospheric freak but an

[2] Robert H. Baker: *Astronomy*, 3rd ed., (New York: Van Nostrand, 1939), pp. 200-201. Italics in the quotation are in the original.

[3] Fred L. Whipple: *Earth, Moon and Planets* (Cambridge: Harvard University Press, 1952), p. 158.

[4] These may be bought from the following observatories: Lick Observatory, Mount Hamilton, California; The Photographic Service Department, Yerkes Observatory, Williams Bay, Wisconsin; Mount Wilson and Palomar Observatories, orders being placed with the California Institute of Technology Bookstore, 1201 East California Street, Pasadena, California. Some commercial establishments also sell photographs and slides. The banded appearance of Saturn shows up well on some photographs. The bands are, of course, quite distinct from the rings.

ever-present, though varying, component of the general circulation of the atmosphere.''[5] Does the hitherto unsuspected jet stream contribute anything to an understanding of the planetary wind-diagram? One of the objections raised against the diagram is the difficulty of accounting for . . . ''an exchange of air between low and high latitudes sufficient to maintain the heat balance on a spherical, rotating earth. . . .''[6] In this connection the role of the jet stream has been suggested as follows: ''The great convolutions of the jet stream represent nature's principal method of exchanging air between polar and tropical latitudes. Were it not for this exchange the equatorial regions would become increasingly and impossibly hot.''[7]

Altho the function of the jet stream is still in the realm of theory and conjecture, a knowledge of its existence accomplishes one thing. It provides a possible mechanism for the exchange of air aloft. Past attempts to show upper air circulation on planetary-wind diagrams have often led to confusion and ambiguity, for it is hard to visualize air traveling in the various ''whorls'' shown on many diagrams in which the ''third dimension'' is added.

Conclusion

Large scale photographs of the banded atmosphere of Jupiter may serve as an ''illustration'' of the planetary-wind diagram, and so increase student interest in it. Even if we assume that the surface pattern of the planetary-wind diagram is essentially correct, there still remains the perplexing problem of what happens in the flow of air aloft. The best diagrams doubtless fail to portray actual conditions of the upper circulation and most of them tend to present a confusing picture of it. However, the jet stream, even tho incompletely understood, provides one possible mechanism for the exchange of air at high altitudes and so it helps to make the planetary-wind diagram more palatable.

[5] Jerome Namias, "The Jet Stream," *Scientific American,* Vol. CVXXXVII (1952). pp. 27-31, Quotation p. 27.

[6] Rostlund, *op. cit.,* p. 290.

[7] Namais, *op. cit.,* p. 29.

PROBLEMS IN PREPARING THE ELEMENTARY TEACHER IN GEOGRAPHY WITH REFERENCE TO CALIFORNIA*

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Geography in California elementary schools has a strong statutory position. There are at least three direct statements in the California Educational Code that elementary teachers shall show proficiency in geography or that geography must be taught in the elementary school.[1] In addition, the Framework for Social Studies of the State Department of Education specifies grade topics as follows: first grade, Home, School and Neighborhood; second and third grades, Community Life at Home and Abroad; fourth grade, California and Mexico; fifth grade, the United States; sixth grade, the Western Hemisphere and Pacific Area; seventh grade, the Eastern Hemisphere.[2] Of course this is a program for integrated social studies. But the mere fact that these are *area* studies should give geography the foremost position in training teachers in their subject matter.

Yet in practice few teachers on the elementary level have any real competence in geographic understanding or have even had a course which would prepare them in geography they can use. The fault lies with the teacher training program and with the academic geographers themselves. It is to be admitted that the training program is crowded. Geography is but one of 29 subjects in which proficiency is required. Futhermore, three phases of geography (physical, political and industrial) are in the list.[3] It would be difficult to require courses in all of the "proficiency" subjects. Nevertheless the strong mandate for geography in the Social Studies Program should be enough to make at least one comprehensive course in geography necessary for every elementary teacher trainee.

However, a study made last year of the training program in

* Paper presented before the National Council of Geography Teachers annual meeting in Washington, D.C., August 6, 1952 and revised for the JOURNAL OF GEOGRAPHY.

[1] State of California, *Educational Code* (Sacramento: Printing Division, 1951) Sections 10052.1, 10302, 12130.

[2] "The Social Studies Program for the Public Schools of California." *Bulletin of the California State Department of Education,* Vol. XVII (1948).

[3] *Educational Code,* op. cit. Section 12130.

various teacher training institutions of California prove this is not the case. Of the 19 institutions which answered the questionnaires only nine required some geography; nine (not necessarily the same nine) required either a course in geography or a course such as "Methods in Teaching Social Studies," and four required only the methods type of course.[4]

That geography is not more evident in the training of elementary teachers is, I think, due to four problems that have not been effectively solved. First, is the material taught in required courses for elementary teacher trainees useful to prospective teachers? Second, what can the teacher use and what does he need from geography to handle the Social Studies program? Third, are children able to learn the geographic material now being taught at the different grade levels? Fourth, does the present Social Studies curriculum fit the needs of elementary school pupils for geographic content material? Each is discussed below.

What Is Now Taught Teacher Trainees?

The statutory requirement for proficiency in the three phases of geography (physical, political, and industrial) noted above certainly seems anomalous when compared with the titles (which presumably indicate the content) of the geography courses required by various institutions for prospective elementary teachers. Titles include "Physical Geography," "Elements of Modern Geography," "Introduction to Geography," "Regional and Economic Geography," "Elements of Human Geography" and "Geography of California." *Not one of these titles indicates that the course is designed for teacher trainees and directed toward their needs.* Of course it is entirely possible that textbook choice and conscientious effort of the instructor orient the material toward the phases of geography that will give the proficiency required by law.

But from the course titles it would seem that these are largely straight geography courses, mostly on a pre-professional level, which would be required of a geography major. Therefore, they contain a great wealth of detail which the major needs to know almost as second nature, but which a teacher of elementary grades will find largely unusable. When a prospective teacher is required

[4] Reith, John W. "Geography in the Teacher Training Institutions of California." Report prepared for the University of Southern California's Council on Teacher Education, 1951. (Mimeographed).

to have a proficiency in so many subjects she can take not more than one or two courses in each. If she can learn only detail in these courses she will be poorly trained to use the material in an understanding fashion. Yet what we want her to have from geography is understanding and not detail. It would be a minor miracle if any or many geographic understandings came from the wealth of detail so frequently presented in required pre-professional type courses.

WHAT CAN THE TEACHER USE?

Geographic understanding can come only from comprehension of the concepts of geography and their applicability. Admittedly elaborating concepts is not the methodology of teaching on the elementary level. The child is supposed to learn a series of facts, correlate them, and then come up with a concept which is broadly applicable. Unfortunately it is easy to demand knowledge of facts but hard to draw the concept out of children. As a consequence the fact becomes the object of study. Not only is this true of the elementary level but it is all too frequently the case in our college courses. Furthermore, our college texts have the same difficulty—much detail but few concepts or basic principles.

At the meeting of the California Council this Spring of 1952 a small group discussed this problem of concepts or principles in geography. One person reported that he had gone thru one of our better-known texts and was unable to find a single statement that could be called a generally applicable principle. It is serious that our discipline has not formulated and used in texts our major principles or concepts. How can the teacher know where the facts she teaches are supposed to lead?

Furthermore, those in other occupations are conditioned to think of geography in its detail, and the understanding we can give with our concepts (and we do have them) is not even considered. We are thought of as dealing with the materials Benjamin Fine tested some months ago.[5] The answers to his questions should be known to everyone who reads a daily paper and a weekly news magazine whether he had taken a course in geography or not. There was not one "how" or "why" in the whole examination.

Of course we are ourselves largely to blame for this condition. We have not accepted the concepts when they were worked out for

[5] Fine, Benjamin, "College Students Flunk Geography," *New York Times*, June 11, 1951.

us. The few articles concerning them have fallen with a thud. When Renner stated the Law of Location for Extractive Industries ("Extractive industries are, and must continue to be, located by the occurrence of their raw materials"[6]), not a few geographers laughed. "It's so obvious, why state it?" said the scoffers. This law should be stated simply because it is basic to all geographic studies of lumbering, fishing and mining. Similar scoffers probably laughed when Newton stated that no two solid objects can occupy the same space at the same time. Yet Newton's law is repeated in every elementary physics book (and it certainly does not hurt to have every automobile driver know it).

Such laws, their corollaries and derivatives, are the heart of our subject and should be recognized, stated and used. Whether we like it or not the integration of subjects on the elementary school level is apparently here to stay. Furthermore, the idea of general education is becoming more prevalent on the college level and is being pushed strongly for adult education programs. Geography is losing out in this developing framework because it has not presented a set of concepts that are usuable in such educational systems. Exception must be noted in respect to the first three elementary grades for which Poole, Barton and Baker have an excellent set of concepts.*

It is not only the educational world that does not know what geography is and what it has to offer. Other academic disciplines frequently pay lip service to geography but are unable to use it because of our lack of clearly stated concepts. When our graduate students write their theses and dissertations they of necessity go into other disciplines in their work. Unable, obviously, to have complete command of the details of these other disciplines they use concepts worked out for them by the specialists. But those in other fields are unable to find our geographic concepts in return. Geography, which we like to consider the corollator of all science, is disregarded.

Some may be thinking that we do have and use principles. We do, but they are sometimes contradictory. In the teaching of the human geography of arid lands we state that isolation was the main reason

[6] Renner, G. T. Jr. "Some Principles and Laws of Economic Geography," JOURNAL OF GEOGRAPHY, Vol. XLIX (1950) 17.

* These concepts, basic for a geography readiness program in grades 1 to 3, are available in the form of a "Concept Chart—Geography Foundation Series," published by the Bobbs-Merrill Company to accompany a series of books.

why Egypt developed such a high civilization so early in history. Then we move across the Mediterranean and talk about the development of the Golden Age of Greece as a result of easy access to the peninsula. Both these explanations sound correct but both cannot be right without qualification. Certainly, conflicting generalizations are not usable by teachers to give geographic understanding, no matter at what grade level they teach.

In our college classes we are only going to have the teacher trainee for three semester units of work, or six at the most. The courses listed earlier in this paper will all contain material that teachers can use. But there will be much that they cannot use. Detail now taught that could be deduced from an overall concept should be eliminated. There is great need for developing courses with content that will give an understanding of geographical concepts together with their applicability.

Altho this will be the best way to present the meat of geography within the time limit available, the presentation must be carefully arranged. Teaching methods used in the grades are such that concepts must be drawn from the pupils by the correlation of facts. Therefore concepts must be graded so that they are not too advanced to be reached by pupils.

CAN CHILDREN LEARN WHAT IS NOW BEING TAUGHT?

The present Social Studies program in California schools seems logically graded. There is a nice progression from the immediate neighborhood outward thru the community to the state, nation, hemisphere and world. Yet practicing teachers find that good comprehension is not being obtained by pupils. In large measure this is due to a lack of adequate grading of content material for which certain untenable assumptions were made. For example, it is hardly possible that a pupil would be able to get much comprehension of California and Mexico (fourth grade) without being able to read a simple map and understand scale, map grids and conventional symbols. Yet Mrs. Mitchell proved as far back as 1934 that children could not understand these conceptual ideas.[7]

But Mrs. Mitchell was practically alone in her study and few if any other studies on the psychology of learning for geographic tools and concepts were undertaken until recently. Mrs. Mitchell's

[7] Mitchell, Mrs. Lucy Sprague, *"Young Geographers"* (New York: The John Day Company, 1934).

studies were largely forgotten and many unfounded assumptions have been used in curricula building. As late as 1945 a leading book on the teaching of history stated, "Children can begin to find places on maps as soon as they have learned to read. They can begin to use a scale of miles as soon as they have learned to count."[8] With the dominance of history in the educational program, the lack of refuting data based upon current factual studies and the inability of children to live up to their assumed mental powers, it is small wonder that practicing teachers teach nothing more than facts. It will only be when we prove by adequate studies *when* geographic concepts can be learned that our discipline will receive its just due in the educational system.

Several studies of this nature have already been initiated, but they are by no means complete. George T. Renner reported to the 1950 meetings of the National Council of Geography Teachers on some of the work of his graduate students.[9] Thomas F. Barton read a paper before the International Geographical Congress in Washington in 1952 on "Geography for Children Ages 6-10" and some of the findings appear in two published articles, namely, "The Sky's the Limit" in the January, 1953 issue of the N E A *Journal* and "Geography for Children Ages 6-8" in the October, 1953 JOURNAL OF GEOGRAPHY.[10] Neville Scarfe also reported to this same meeting on some studies made under his direction on research in the teaching of geography.[11] All of these studies had some important contributions but are by no means complete nor even in exact accord on all points. We must have more studies on the learning readiness of children, for the whole status of geography in curricula depends on them.

DOES THE PRESENT CURRICULUM FIT THE NEEDS?

Until we know the answers about the learning readiness of children for geography we can hardly expect to effect curriculum

[8] Johnson, Henry, *The Teaching of History*, Revised edition (New York: Macmillan Co., 1945) 102.

[9] Renner, George T. Jr. "Learning Readiness in Elementary Geography," JOURNAL OF GEOGRAPHY, Vol. L (1951), 65-74.

[10] Barton, Thomas Frank. "Geography for Children Ages 6 to 10." Paper read before the International Geographical Congress, Washington, D.C., August 1952.

———, "The Sky's the Limit," *NEA Journal*, Vol. XLII (1953) 19.

———, "Geography for Children Ages 6-8," JOURNAL OF GEOGRAPHY, Vol. LII (1952) 281-91.

[11] Scarfe, Neville V. "Recent Research on the Teaching of Geography." Paper read before the International Geographical Congress, Washington, D.C., August 1952.

changes. The present program of integrated social studies seems well rounded and until we prove geography is not placed correctly for greatest benefits there will be no change. Those who develop curricula recognize that geography has much to offer at many grade levels, but we have not been able to speak up with sufficient force as to our place and function. Because we have not been able to prove our points geography has been slighted. Those who advised the California legislators to require all candidates for the elementary credential to show proficiency in physical, political and industrial geography had the best of intentions, but was it the best thing to do? Similarly the grade level topics of the Social Studies program require geography which seems to be too advanced for adequate assimilation. We must tell the curriculum builders just what we can do and at what level. If we allow geography to be placed too early in the curriculum, the teacher is apt to teach geographic detail or better graded subjects which the pupil can comprehend. As a consequence geographic understanding loses out entirely, and our citizens remain geographic illiterates.

CONCLUSIONS

Preparing the elementary teacher in geography is not merely requiring teacher trainees to take a basic geography course. The teacher needs basic geographic concepts such courses seldom contain. Special geography courses must be organized for the teacher trainee which will contain geographic concepts so that the teacher will have an objective for her teaching. However, there is sufficient evidence that even if such material is prepared and taught to the teacher trainee she may not be able to use it because the pupil, according to the curriculum now in use, must be presented with tools and ideas before he is mature enough to use them. This requires a change in the curriculum if our future citizens are not to remain geographic illiterates. We can force such curriculum changes only when sufficient studies are made on the learning readiness of children to prove that present practice is not correct.

THE HALFMOON BAY LITTORAL OF CENTRAL CALIFORNIA

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One of the less known portions of California is the seaward side of the peninsula immediately south of the Golden Gate. The lack of development of this littoral is rather remarkable because attractive stretches of coast are apt to be commercialized rapidly in California. It is all the more remarkable because the area in question is part of the very populous Peninsula of Central California.[1] Indeed, at its northern and southern ends respectively, stand the cities of San Francisco and Santa Cruz with a combined population of some 800,000 people.

AN UNDERPOPULATED AREA

The Peninsula, of which the littoral in question is a part (Fig. 1), is a long triangular piece of land trending northwestward between San Francisco Bay and the Pacific Ocean.[2] Its backbone or axis is the rather formidable group of ridges collectively known as the Santa Cruz Range. The area of The Penninsula is approximately 1,000 square miles and the population (1950) about 1,165,000.

Most of the inhabitants are to be found on the low eastern (or inland) side of The Peninsula, where the numerous small cities which line Federal Highway 101 (El Camino Real) threaten to coalesce into a continuous urban formation all the way from San Francisco to San Jose. On the other hand, the picture is quite different on the western side of The Peninsula. There, land-hungry San Franciscans are not spreading southward along the Halfmoon Bay Littoral,[3] nor are the citizens of Santa Cruz spreading northward. Large areas are, indeed, empty of inhabitants. Only one village, Halfmoon Bay, contains more than a thousand inhabitants

[1] According to a communication, dated June 23, 1950, from the United States Board on Geographic Names this feature has no established name; the inhabitants refer to it merely as "The Peninsula."

[2] Its base is a line drawn from the southern tip of San Francisco Bay across to Monterey Bay, and upon its apex stands the city of San Francisco overlooking the Golden Gate.

[3] So named for Halfmoon Bay, the only noteworthy indentation on this 70-mile stretch of coast between the Golden Gate and Monterey Bay.

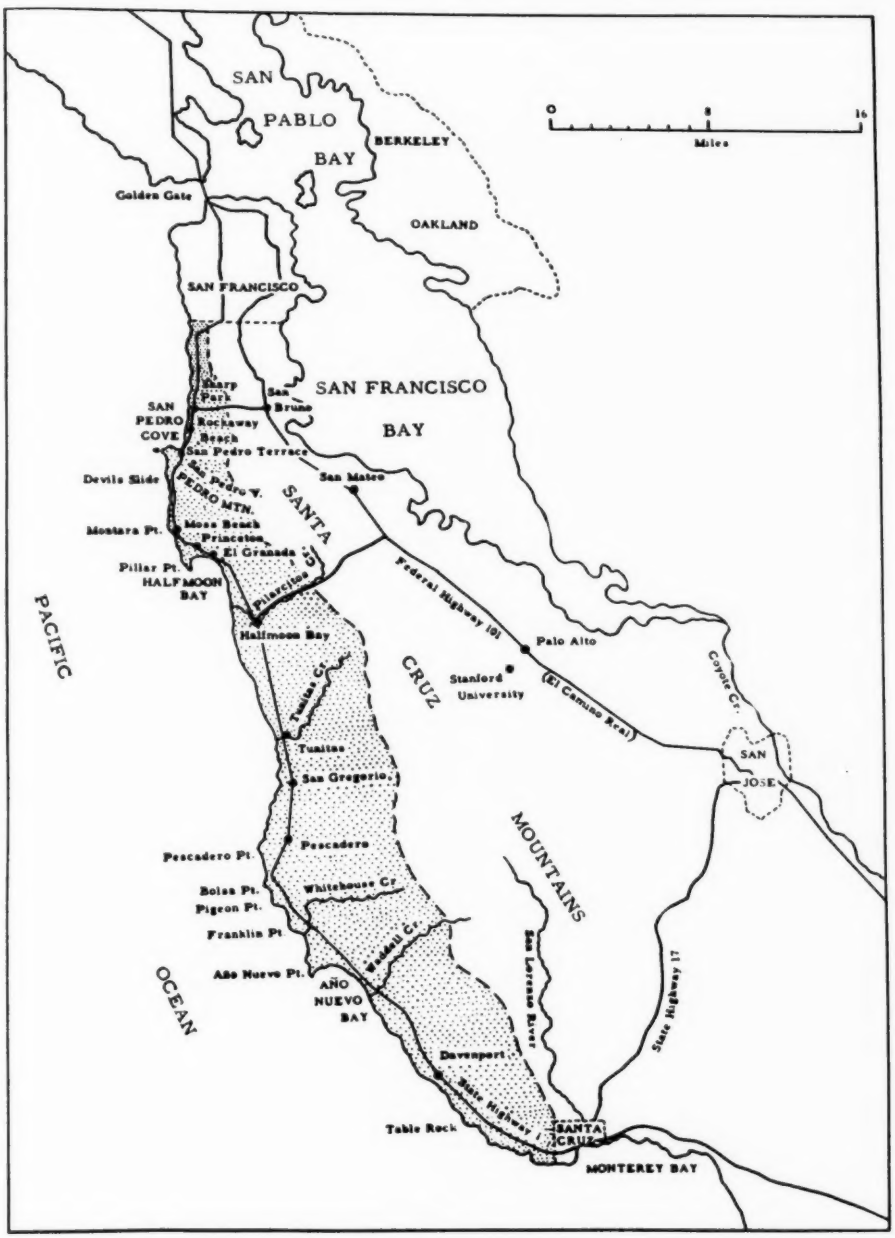
SAN
PABLO
BAY
BERKELEY
Golden Gate
OAKLAND
SAN FRANCISCO
SAN FRANCISCO
BAY
Sharp Park
San Bruno
SAN PEDRO COVE
Rockaway Beach
San Pedro Terrace
Devils Slide
San Pedro V.
PEDRO MTN.
San Mateo
SANTA
Montara Pt.
Moss Beach
Princeton
El Granada
Pillar Pt.
HALFMOON BAY
Pilarcitos
Federal Highway 101
Palo Alto
PACIFIC
Halfmoon Bay
CRUZ
Stanford University
(El Camino Real)
Coyote Cr.
Tunitas Cr.
Tunitas
SAN JOSE
San Gregorio
MOUNTAINS
Pescadero
Pescadero Pt.
Bolos Pt.
Pigeon Pt.
Whitehouse Cr.
Franklin Pt
Waddell Cr.
San Lorenzo River
Año Nuevo Pt.
AÑO NUEVO BAY
OCEAN
State Highway 17
Davenport
State Highway 1
Table Rock
SANTA CRUZ
MONTEREY BAY
0
8
16
Miles

FIG. 1

(1,168 in 1950). The total population of the Halfmoon Bay-El Granada-Princeton District probably does not exceed 1,500. There are three lesser villages—Sharp Park, Pescadero and Davenport—six small hamlets— Edgemar, San Pedro Terrace, Montara, Moss Beach, San Gregorio and Rockaway Beach—and a few even smaller populated places, located at intervals along the coast and in the larger glens.

The inhabitants of these villages and hamlets, together with those located on the several score of farms along the coast, give to the area a total population probably not exceeding 6,000 persons. The length of the Halfmoon Bay Littoral is about 70 miles as measured from the city limits of San Francisco to those of Santa Cruz; the average width from the shoreline to the crest of the first ridge encountered in going inland is approximately four miles. Thus, the total area of this subregion is some 300 square miles and the density of population is not much over 20 per square mile, a remarkably low figure for an area lying between two cities in a region of general land scarcity.

THE NATURAL ENVIRONMENT

The Halfmoon Bay Littoral is not in any sense a coastal plain. It is merely a wave-cut terrace varying in width from a few feet to a mile or more. It reaches its greatest width of two miles at Halfmoon Bay near the mouth of Pilarcitos Creek, its narrowest where Pedro Mountain reaches the ocean a few miles to the northwest. In places, the coast is a low sand or pebble beach; in other localities active cliffing is in progress. Above this lowest level the land rises by a series of six or seven Post-Pliocene marine terraces[4] to the remnants of the Skyline Peneplane preserved at elevations varying from 1,160 to 2,600 feet on Ben Lomond, Butano, Cahill, Montara and Sweeney ridges.[5]

There is considerable physical diversity along this western margin of The Peninsula. For some 12 miles southward from San Francisco there is a series of cliffs and valleys. The most prominent cliff is Devils Slide, the seaward flank of Pedro Mountain; the most important valley is that of San Pedro Creek. The next 23 miles is

[4] A. C. Lawson, "The Geomorphogeny of the Coast of Northern California," *University of California Bulletin of the Department of Geology*, I (University of California Printing Office, Berkeley, California, 1893), pp. 246-247.

[5] ——, *Geologic Atlas of the United States, San Francisco Folio, California*, Folio No. 193. (Washington, D.C.: U. S. G. S., 1914), p. 4.

the relatively broad lowland about Halfmoon Bay, together with the fertile glens formed by Pilarcitos, Tunitas, San Gregorio, Pescadero and other creeks. Then come 15 miles of coast formed by the five cusps of Pescadero, Bolsa, Pigeon, Franklin and Año Nuevo points. The final 20 miles consists of a continuous terrace which widens as one approaches Santa Cruz. (Fig. 2)

On the ridge summits there are forests of pine and coast redwoods, while the canyons and deeper gullies are filled with California laurel, creek dogwood, arroyo willow, wax myrtle and coast

FIG. 2. The wide coastal terrace in the south near Santa Cruz; a plowed field prepared for wheat in the foreground. A stock-feeding farm in the middle background. Monterey Bay in the distant background.

live oak. The slopes and the coastal lowland carry a grass cover broken by extensive patches of chaparral and coast sage.[6]

The climate of the western littoral of The Peninsula exhibits the general Mediterranean Subtropical characteristics but its rainfall exemplifies the wetter phase of that climatic type. There are frequent cloudy spells in winter, and sudden dense fogs may occur during spring and autumn. Onshore winds in summer are sometimes disagreeably chilly. These adverse traits are, however, merely those shared with other stretches of the central and southern California coast, and in this instance they are more than counterbalanced by superior scenic quality and location close to large urban populations.

SETTLEMENT AND TRANSPORTATION

The Halfmoon Bay Littoral was discovered by a Spanish navigator, Captain Francisco Gali, in 1585, but it was not explored until Captain Gaspar de Portola's expedition reached the area in 1769. The first house was built by a Spanish settler on the bank of

[6] Most of the data for this paper were obtained through field studies made during the summers of 1949 and 1950 by the writer.

San Pedro Creek (Fig. 3) in 1817.[7] After 1840, Spanish settlement began in earnest. Several rancheros moved into the area and a hamlet called Spanishtown grew up on the site of the present village of Halfmoon Bay.

Many of the present inhabitants of Halfmoon Bay are descendants of these early Spanish colonists. Edgemar and Sharp Park were settled by Irish and later by Italians. In the 1850's, Portuguese farmers from the Azores settled farther to the south and carried on whaling under the direction of a New Englander, Captain John Davenport. French, American and other peoples soon

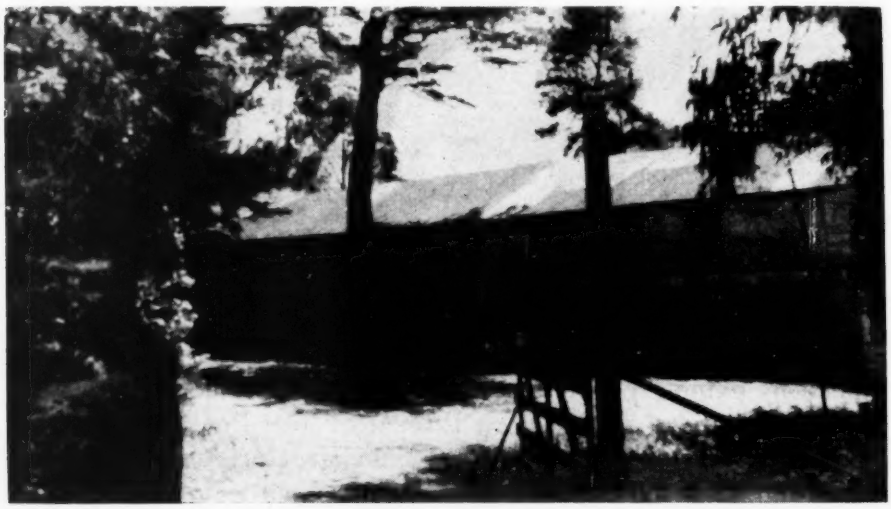

FIG. 3. The Francisco Sanchez adobe house as viewed from the rear entrance drive. This adobe, located near San Pedro Terrace, is the oldest dwelling in the area.

followed. Japanese and Filipinos came into the area much later.

The sea was the main highway in the early 1800's, but a beach road for stagecoach and horseback travel was constructed during the later decades of the century. In the early 1900's construction was begun on the Ocean Shore Railway. Track was laid from San Francisco southward to Tunitas Glen and from Santa Cruz northward to Davenport. The two lines were supposed to meet, but the 25 mile central section was never completed. The line continued operations until 1919, at which time it was abandoned. Vacationers and commuters failed to use the line in great numbers, whilst the

[7] In 1842 the Sanchez adobe house was built on this same site. The earlier 1817 house had, it is said, been built of timbers from a ship wrecked on San Pedro Point.

farmers continued to send their produce to market on small coastal ships. Later, when State Highway 1 was constructed, most farm produce began to be carried by trucks.

INDUSTRIES AND RESOURCE USE

The dominant form of land use in the area is agricultural, and this is mainly of four types—horticulture, dairying, poultry rearing and field-crop production. Horticulture is the most important type, engaging some 14,000 acres and yielding an annual gross crop value of about $5,000,000. The two most important vegetable crops are

FIG. 4. Old wave-cut cliff north of Halfmoon Bay, near the village of Princeton. Field of Brussels sprouts in the foreground.

artichokes and Brussels sprouts (Fig. 4), although peas, field beans, cabbage, lettuce, horse beans, potatoes and carrots are grown in quantity. The main areas of artichoke and Brussels sprouts production are in the San Pedro Valley, on the land about Halfmoon Bay, and in Tunitas Glen. Plantings, which occupy some 4,000 acres, are limited to areas which are cool and foggy in summer and as near frost-free as possible during the winter. Most of the fields are irrigated twice a month during the growing season. The yearly production of artichockes ranges from 70 to 150 boxes per acre, that of Brussels sprouts from 3,500 to 8,000 pounds per acre. The growing of flowers is important, and concentrated mainly in the valley of Pilarcitos Creek.

Wheat is a common crop along the coast (Fig. 2). Barley is important on the light soils of the Año Nuevo district. Flax is grown in the glens. Oats and hay are produced on the upper marine terraces. Poultry rearing is common at the northern end of the coast, eggs and fowls being sold in the San Francisco markets. From Halfmoon Bay southward, Jersey, Guernsey and Holstein-Friesian cattle are pastured on the hill slopes and upper terraces. The dairy industry is not large but the possibilities for expansion are significant.[8]

In the past, considerable amounts of redwood, cypress and pine have been cut on the Santa Cruz Mountains and hauled down to the coast to be sawed into lumber. At present, the cut is much reduced from former years. Other extractive industries are also small. Montara granite is quarried at Montara Point, as are cement materials near Davenport. Beach gravel is dredged from the ocean at Mori's Point, and three small oil wells are to be seen between Princeton and Santa Cruz. Both shore and deep-sea fishing are prosecuted commercially. The industry is centered in Princeton and yields abalone, albacore, salmon, smelt, black snapper and several other varieties of fish.

Manufactural enterprises are expectably few and small. At Halfmoon Bay and near Santa Cruz, packing plants grade and crate artichockes and Brussels sprouts. Candle making is carried on north of Princeton. The drying and dipping of "everlasting" flowers is centered at Montara. At Davenport a large cement factory is thriving. One sawmill is operating near the mouth of Whitehouse Creek.

The beaches are clean sand; sheltered waters are common; beach and dune flowers are varied and beautiful, and the scenery is highly attractive. Conditions for recreational industries and tourism are, therefore, quite favorable. Considerable numbers of people visit the area by automobile, but most of them are city folk bent on spending from a few hours to one day picnicking, swimming or fishing. Some tourists and week-end visitors do come to the northern part of the coast, but accomodations are neither good nor adequate. There are only a few tourist cabins and beach cottages available. There are no good tourist homes, hotels or even restaurants to be found.

[8] J. J. McNamara, *Report on San Mateo County Field Crops Projects* (University of California Press: 1948).

THE RETARDING FACTOR OF PROVINCIALISM

The western littoral of The Peninsula lies virtually within the metropolitan area of the Bay Cities. It is, however, in no way metropolitan. Instead it is oddly isolated, almost remote, in its atmosphere. As a consequence provincialism is strong and obvious. In part this is a result of the character of the early settlers, but in larger part it is a result of the economic stagnation of the area's economy.

The major resources of the Western Littoral fit it for suburban commuters' residences at either end and for the tourist industry in the central reaches. Recently State Highway 1, the axial North-South line of transportation, has been improved to the point where it is now in excellent condition. This has not, however, resulted in much suburban settlement even tho the area is greatly underpopulated. Provincialism is such that new settlers have neither been encouraged nor welcomed by the local people. Nor have new economic enterprises been encouraged. Wartime expulsion of the Japanese hurt the artichoke industry and the latter's recovery has been slow. In a State noted for its tourism, this area's manifold attractions for tourists have not been commercialized. More and better East-West roads across the Santa Cruz Range are needed —particularly a high-speed, paved highway from Palo Alto and Stanford University directly across the mountains to the coast. In addition to improvements in the road pattern, tourist facilities must be established, and the retarding aspects of the area's provincialism abated, before the Halfmoon Bay Littoral can become populous.

ARE WE ADEQUATELY UTILIZING THE GEOGRAPHIC FILMSTRIP?

THOMAS FRANK BARTON
Indiana University

In your teaching of Geography during the past week, month or year, how often have you used filmstrips? Have you taught your pupils the mechanics of filmstrip projection and if not, why not? Are the projector, screen and filmstrips readily accessible to the

pupils in your classroom? Do you have a well-stocked, carefully-selected filmstrip classroom library or a readily accessible visual aids library adequately stocked?

Filmstrip Projection

Is filmstrip projection so difficult that it cannot be taught to nine- or ten-year-old children? Have you tried to teach this projection skill to intermediate grade children? The writer believes that normal, healthy children of this age group who can be taught to write and finger musical instruments can and should also be taught to use a filmstrip projector. There is nothing very difficult about taking a filmstrip from a metal case, threading the projector and running the filmstrip both forward and backward. Nor is there any insurmountable obstacle to teaching children of this age to rewind the filmstrip by hand. And where the machine is equipped with a "rewind take up," hand rewinding is not necessary. There are a few "tricks" to projector operation but these can be quickly mastered by most pupils intelligent enough to be in the fourth or fifth grades. Given an opportunity and a few old filmstrips, some of the more mechanically efficient pupils who have been taught the skill can teach others.

Perhaps three of the chief obstacles to teaching the skill are: 1. the teachers do not appreciate potential learning with strips; 2. equipment is not available, and 3. many teachers are not aware that recent mechanical improvement in filmstrip projector construction enables it to be used without darkening the classroom.

Locked in filmstrips today is a wealth of knowledge which is not being made available to many of our children. Access to this information can only come thru filmstrip projection skill and an opportunity to use it in connection with a filmstrip library. It is essential today for children to have this skill as it is to acquire skills in writing, reading, using the dictionary, atlas, table of contents and index. To the list of skills we must simply add that of operating a filmstrip projector.

If financially possible should there not be a projector for each classroom above the third grade where geography is taught?

The projector and facilities for its use should occupy a definite place in the room and be made so accessible that it will not take more than a minute or two to put it into operation. Tom Smith should be able to step to the machine and run a strip he has selected

in a matter of a few minutes, just as he might select a book from an open shelf and spend some time looking up material. But where a pupil takes the book to his own desk, the projector stays in one place except when the teacher has a filmstrip he wants the entire class to see. In the lower grades only the teacher should move the projector.

LOCATION OF THE PROJECTOR

The projector may be placed in one of the room corners. The showing of strips in such a location will be less likely to distract other pupils. Moreover, a corner is often the darkest part of the classroom.

Where necessary one may put up an inexpensive booth. A corner is a logical location for such a booth. By placing an upright steel rod several feet from the corner one can fasten the top of this rod to both walls with two horizontal bars. Dark curtain hung on the horizontal bars bars provide the two additional walls. Within the booth may be placed the screen, a small table, the projector and a chair or two for the viewer and operator of the film.

An enclosed booth has its advantages and limitations. On the one hand, the enclosure is darker than an unenclosed corner. Other children will not be as easily distracted. On the other hand, the operator is not directly under the teacher's supervision. He may waste time. Other children may not know if the projector is in use. The curtain arrangement has elasticity, however. There is nothing to prevent the teacher from insisting the curtains on one side or both be left partly open.

Conditions will vary from room to room but under normal circumstances a booth may be unnecessary or even undesirable. Some machines are so constructed that projection is possible in broad daylight. Or a small screen may be recessed in a box and the sides of the box will darken the screen sufficiently for satisfactory use. Or a table top screen with side shutters may be used. When there is no booth the projector and its operator are in full view of the teacher and pupils. As soon as one pupil is thru with his filmstrip, another can take his place.

FILMSTRIP LIBRARY

Not only should a projector and facilities for viewing the strips be constantly available, but each classroom should have a well-

stocked, carefully-selected filmstrip library. If any strip for some reason is not to be used by the pupils, it should be stored in the teacher's office or desk.

In general there are three commercial types of storage for a classroom library. There is an open-face, standard filmstrip wall file so constructed that additional units may be added (each unit having individual key-numbered compartments for 90 filmstrips). The units may be hung on a wall or rested flat on a table.

Cabinets and drawers of various sizes designed for filmstrip storages are available. One can also buy a combination standard filmstrip projector stand and storage cabinet. Each has advantages and limitations, and the teacher must consider these before reaching a decision concerning the needs of her room and the equipment which will meet her needs.

The library should be stocked with carefully selected geography strips. There are scores of geography filmstrips now on the market and quality varies. It is interesting to note that four of the 10 top filmstrips to receive the *Scholastic Teacher* magazine awards for outstanding merit in 1952 are useful in the teaching of geography, namely; *The Navajos* (Life Filmstrips); *Petroleum in Today's Living* (American Petroleum Institute); *Then and Now in the United States* series (Silver Burdett); and *U. S. Regional Geography* series (Young American Films).

Unfortunately many teachers of geography do not know the names and addresses of companies selling strips with geography themes or containing pictures which help substantiate geographic concepts. To help these teachers get started, permit me to list here a few which have been called to my attention (but will the reader bear in mind that the following list is neither select or complete nor listed in any order of importance):

Society for Visual Education, Inc., 1345 W. Diversey Parkway, Chicago 14.

Silver Burdett, 45 East 17th St., New York 3.

Life Filmstrips, 9 Rockefeller Plaza, New York 20.

Young America Films, 18 East 41st St., New York 17.

The Filmstrip House, 25 Broad Street, New York 4.

The Stanley Bowmar Co., 513 West 166th St., New York 32.

Yale University Press Film Service, 386 Fourth Avenue, New York 16.

British Information Services, 30 Rockefeller Plaza, New York 20.

Museum Extension Service, 10 East 43rd St., New York 17.
United World Films, Inc., 1445 Park Ave., New York 19.
Visual Sciences, 599 E. Suffern, New York.
The Jam Handy Organization, 2821 East Grand Boulevard, Detroit 11.

LIMITATIONS

As we all know there are limitations and advantages in the use of any audio-visual aid and the filmstrip is no exception.

Perhaps seven of the more important limitations are: 1. pupil damage, 2. lack of mechanical ability, 3. pupil monopoly, 4. detracts from other activities, 5. rigid sequence of frames, 6. cost, and 7. inadequate or poor quality of strips.

Assuming the pupils use the filmstrip correctly, the strips still will wear out. However, should they provide a learning situation we should not mind normal wear. Old filmstrips may be used when the pupils are learning the mechanics of projection. Now and then there will be accidents with this tool as with any other, but if the proper use of this material is taught, damage should not be excessive.

We know that mechanical skill varies with children of the same age. If some do not wish or are mechanically unable to operate a filmstrip projector, they should not be punished or ignored in any way. The use of this tool especially in the intermediate grades should be completely optional. But an opportunity to use this tool should be encouraged thru providing equipment and some instruction in its use. Moreover, those more mechanically inclined might be permitted to show the strips to others.

At first some children may wish to monopolize the use of the projector. When the newness wears off, this problem partially solves itself. Pupil monopoly of any classroom tool is an old problem which every alert teacher knows how to handle. And unless properly supervised there is always a tendency for some pupils to spend too much time with any tool.

The filmstrip does not permit the elasticity of changing the order of individual pictures. However the filmstrip can be turned forward or backward or run thru several times. For younger children the fixed sequence of pictures may be an advantage since they may not be mature enough to arrange pictures in a logical sequence. If over half the frames are poor or incorrect, the strip should not be purchased in the first place. If, after a few years' use, some of the frames in a filmstrip become inaccurate, the teacher may well

consider cutting the frames and making slides with the better ones.

The initial outlay of funds for a good projector, screen, strips and other materials may run between 100 and 225 dollars—the approximate price of several motion picture films. Cost of many individual filmstrips runs between two and one-half to five dollars each. Often there is a reduction in cost per strip if several are purchased at one time.

Before and during the Second World War the construction of good filmstrips in the field of geography was neglected. Since that time many very fine and worthwhile strips have been placed on the market.

Advantages

The advantages of the filmstrip to an experience-activities-workshop method of teaching is obvious. Some of the advantages are: 1. pupils learn by doing; 2. the filmstrip is adaptable to individual needs; 3. it is easier to correlate the filmstrip content with the subject matter schedule; 4. this media contains a storehouse of vivid pictures of reality; 5. individual filmstrip projection enables the pupil to see a greater number and variety of pictures; 6. the strips provide a wealth of vicarious experiences; 7. a smaller number of pictures with time for study and reflection may give younger children stronger impressions; 8. stimulates interest in reading; 9. when used by the class they provide opportunity for pupil and teacher questions and comments; 10. greater pupil familiarity with this tool makes it a better testing device; 11. filmstrips are a comparatively inexpenive visual aid; 12. this visual aid can be child-operated; and 13. little storage space is needed.

Filmstrips, as books, are very adaptable to pupil needs. When a variety of both are available the pupil can select and use the ones he personally feels he will enjoy and find helpful. The pupil may not only select the filmstrip of his choice, but he may look at the individual pictures as long as he wishes. If later in the sequence he wishes to turn back to an earlier picture, he may do so. Moreover if he wishes a repeat showing he may have one immediately or at some later time.

It is much easier to correlate filmstrips with the subject matter schedule because the school can buy a dozen or more filmstrips with the same amount it would take to buy one color sound motion film. In fact, one may purchase a filmstrip with the rental cost of a film. Moreover the filmstrips are in the classroom library ready for use

at a moment's notice whereas it is often difficult or sometimes impossible to schedule motion film rentals to coincide with the subject matter thruout the year.

Filmstrips contain a storehouse of vivid pictures of reality—often made at enormous expense by the most talented and highly paid photographers in the world. Sometimes the sale of filmstrips would not make such photography economically feasible. Fortunately the pictures are taken for other purposes and then made available to education. Many of you have seen or used Life Filmstrips provided in this manner. The quantity and quality of geographic filmstrips is increasing.

There is insufficient time for the teacher to show the class all of the good filmstrips. But many energetic and brighter pupils have "time on their hands." Filmstrip projection would provide an instructive activity for the brighter children. This visual aid enables the teacher to provide for individual differences without resorting to dull, monotonous, "mischief-breeding" busy work.

The filmstrip not only provides additional learning experiences for the more advanced pupils in the grade but may also provide a wealth of vicarious experiences for the underprivileged pupils. If you cannot take children to see the various everyday scenes of how people live, then the next best action is to bring the scenes by means of filmstrips to them.

Unless carefully persented, too many pictures may effect younger pupils adversely in a variety of ways. Some become disinterested; others are left rather dazed. Apparently few get a rather complete, well-rounded impression from the first showing of hundreds of frames. The filmstrip in contrast contains a relatively small number of pictures which can be studied rather than glimpsed.

It is because the filmstrip contains fewer frames which may be viewed for a longer period of time and by individual pupils which enables it to supplement the purpose and objective of the educational motion picture. Some teachers now use filmstrips to show various phases or parts of a motion picture theme before and/or after the motion picture. After presenting the topic piecemeal in filmstrip, the motion picture is used to demonstrate action and present the subject as a whole.

With an appropriation of one hundred dollars a year per classroom, in a few years a teacher could accumulate over a hundred geography filmstrips.

Filmstrips take up little storage space. Yet by means of projection, the minute pictures appear on screens of various desirable sizes. For individual showings, a translucent screen 9 x 11 inches may be used.

Misuse or Non-use

As is true of all audio-visual tools or any teaching technique, the filmstrip can be misused by teachers and pupils. Suffice it to say that the potential of misuse is no justification for non-use. In fact one may well raise the question as to whether or not non-use should not rank first among the misuses or abuses of the educational geography filmstrip.

REPORT OF THE THIRTY-NINTH MEETING OF THE NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

Several hundred members and guests attended the annual meeting of the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS held in the Hotel Statler, Buffalo, New York, on November 27 and 28, 1953. The geographers came from 19 states and several foreign countries; many of our Canadian colleagues were in attendance. As might be expected, New York had the largest number in attendance, followed by Pennsylvania, Ohio and Illinois. The registrants also included graduate students from colleges and universities of Buffalo, school administrators and representatives of publishing companies. Encouraging, indeed, is the fact that there is in attendance an increasing number of geography teachers of the elementary and secondary levels.

The meeting this year was held in conjunction with that of the NATIONAL COUNCIL FOR THE SOCIAL STUDIES. Although the two organizations held separate business sessions, many programs ran concurrently and were open to members of either organization. The full program appeared in the September issue of the Journal.

The program provided for three General Sessions, one Breakfast and two luncheon meetings and four Sectional Sessions. The Luncheon meetings, an innovation this year, proved to be highly successful as evidenced by the large attendance. The program at these meetings dealt with timely subjects which were followed by lively discussions under capable leadership.

The Breakfast meeting on Saturday was arranged by the Director of State Coordinators, Mamie Anderzohn. The Sectional Sessions were held concurrently on Friday afternoon and dealt with vital problems in the field of geographic education.

Nearly 800 persons crowded the Ballroom of the Hotel Statler for the banquet which was held jointly by the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS and the NATIONAL COUNCIL FOR THE SOCIAL STUDIES. Dr. I. James Quillen of Stanford University served as toastmaster and the address was given by Dr. Joseph E. Johnson of the Carnegie Endowment for International Peace.

At the banquet, Dr. Henry J. Warman, president of the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS, presented Dr. Thomas F. Barton, editor, Journal of Geography, who announced the annual winners of the Journal of Geography prizes. The

winners of the prizes were published in the February, 1954 issue of the JOURNAL.

The Distinguished Service Award citation, was read by Dr. Katheryne Thomas Whittemore, and the award was made to Cora P. Sletten.

At the close of the banquet the schools of Buffalo presented a delightful program of folk and square dancing. The dances were beautifully executed.

MINUTES OF THE SEVENTH GENERAL ASSEMBLY

The Seventh Annual General Assembly met on Saturday, November 28, 1953 at 10:45 A.M. in Parlor H of Hotel Statler. Sixty members were present. The secretary gave the report on our "Thirty-Ninth Year."

The treasurer, John Garland, made his report on the financial status of the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS. The report, examined by a certified accountant who found the books in order, was accepted. The books are to be closed at the end of the year 1953.

Zoe Thralls, Chairman of the Planning Committee, recommended the creation of several new project committees and outlined the character of the work to be done by each. Dr. Thralls outlined the purpose of the Planning Committee, which is composed of the three most recent past presidents, stating that thru its deliberations a continuity of our projects is maintained.

The Planning Committee recommended the continuation of the work of the present active committees and proposed the creation of the following new committees, namely: 1. The Committee for Secondary Education; 2. The Committee of Maps; 3. The Committee of Reading Materials and 4. The Committee on Conservation.

It was also suggested that the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS consider the publication of yearbooks at intervals, and the publication of an *Index of Journal of Geography Articles.*

A complete report of the Planning Committee is filed with the Minutes of the Executive Board.

THE REPORT OF THE RESOLUTIONS COMMITTEE

The Resolutions Committee presented the following report to the General Assembly of the NATIONAL COUNCIL OF GEOGRAPHY TEACHERS.

1. America cannot adequately take its place in the world, or solve its domestic problems, without a sounder appreciation of geography. This calls for education at all levels, from elementary thru adult. For example, children need to understand the significance of location, high school pupils need a vastly greater appreciation of resources and college students must learn their responsibilities as members of a world community. Geography must be presented at the adult level.

The NATIONAL COUNCIL OF GEOGRAPHY TEACHERS recognizes many educational needs but calls special attention to two. First, on the elementary level, teachers need much more adequate preparation in geography in order to teach those areas of the curriculum in which geography contributes the major understandings. To properly interpret and implement geographic concepts and generalizations requires more thoro preparation at the college level than is now generally provided.

Second, on the adult level, most professional geographers have failed to write for the general public, and where popular volumes or articles have appeared, they have too often featured the sensational rather than the basic aspects of geography. The Council believes that geography offers material of such attractive appeal that every magazine of general circulation should carry geographic material by geographers at least once a year.

2. Since geography includes only a part of the entire field of knowledge, and it is obivious that this segment cannot be understood aside from the whole, the National Council welcomes cooperation with all related fields, such as history and the other social

studies or the physical sciences. At the same time, the Council would emphasize that geography itself represents a high level of integration. In its concern with all the phenomena which give personality and meaning to place, geography has a function which parallels the chronological interests of history; each deals with a wide array of human affairs: primarily the one in space, primarily the other in time. Where geography loses its identity in general courses, the awareness of space relationships is endangered. The National Council of Geography Teachers thus emphasizes the importance of geography as geography and points out that it cannot make its full contribution unless its character is preserved.

3. The National Council of Geography Teachers records its belief in the importance of good teaching, and urges State Councils and other groups to recognize successful classroom teachers in their areas. The Council recognizes the splendid work now being done by hundreds of devoted teachers at all levels. Great credit must be given them for the contributions which geography has made to millions of American citizens.

4. In view of the important place which geographic concepts hold in many social studies curricula, as well as for the presentation in geography courses as such, the National Council of Geography Teachers urges that all State Boards of Education have as a member of their staff, in whatever capacity may be appropriate, a geographer with professional qualifications.

5. The National Council of Geography Teachers acknowledges its deep appreciation to those who have made these Meetings at Buffalo so successful: to the local Committee and its members under the leadership of Professor Katheryne Whittemore and Professor Gabriel Betz; to the cooperating groups in the National Council for the Social Studies; to President Warman and to the many participants in the program.

JOHN REITH
MELVINA SVEC
GEORGE B. CRESSEY, *Chairman*

THE NEW ADMINISTRATION

Dr. David Koch, acting for the chairman of the Nominating Committee, presented the following slate of officers for the ensuing year: President, Otis W. Freeman, President Emeritus, Eastern Washington College of Education, Cheney; First Vice-President, M. Melvina Svec, State University of New York Teachers College, Oswego; Second Vice-President, Mamie Anderzohn, William Beye School, Oak Park, Illinois; Treasurer John H. Garland, University of Illinois, Urbana.

(Since the secretary is elected for a term of three years, the present secretary serves until February 1, 1955.)

For the three year term on the Executive Board the following candidates were nominated: Sidney Ekblaw, Warren Strain and Chester Cowle. Chester Cole replaced M. Melvina Svec who automatically becomes a member of the Executive Board by virtue of her election to the office of First Vice-President.

Members of the Nominating Committee were Loyal Durand, Jr., David Koch and Kenneth Bertrand, Chairman.

The secretary cast the unanimous ballot for the slate of officers.

NEW BUSINESS

Under new business it was recommended that the Executive Board be increased by three more members. To do so, however, a slight change in the constitution is required. Dr. David Koch moved that Article IV, Section 3, read "nine" in place of "six." The motion was seconded by Lewis Alexander and passed.

Gabriel Betz moved the adjournment of the Seventh General Assembly.

Signed: INA CULLOM ROBERTSON, *Secretary, National Council of Geography Teachers.*

GEOGRAPHICAL PUBLICATIONS

Ruby M. Harris. Canada and the Far North Series of four filmstrips entitled **Lands of Few People** (49 frames); **Southwestern Canada and the Wheat Region** (50 frames); **Region of Most People and Southeastern Canada** (52 frames); and **Alaska—The Land and Its People** (44 frames). Society for Visual Education, Chicago 14. Each strip **$6.00** and complete set **$19.00.**

These filmstrips are produced primarily for the elementary grades, but their universality makes them useful at other levels. Tho prominence is given the McConnell text: *Geography of American Peoples* in the introductory frames, no definite correlation is attempted and the filmstrips can be used readily with other texts.

The color reproduction of scenes is excellent. A few light frames are evidently due to lack of sharper originals. But maps are a great disappointment. The well-known Rand-McNally color maps are used. They seem not to be drawn for the films but merely adapted, as Detroit which is to be identified in one film is partly cut off. The suggested locations are impossible at more than 3-4 feet from the screen. There is an unfortunate use of the conic projection, which gives a misleading idea of directions and shape. When Alaska is superimposed on a United States map the difference in appearance is confusing. The plain color maps used for specialty areas or features are far superior.

The theme of the films is "How Man Makes a Living."

In *Alaska—the Land and its People* Eskimo life is shown influenced by imported items of clothing but the native still prepares most of it. Reindeer herding, gold mining, and fishing, both by Eskimos and commercially, are noted. Considerable emphasis is placed on Matanuska farming. There is transportation by water, rail, highway and dog sled. Alaska's significant location for air routes is proved by a map centered on the north pole.

Lands of Few People includes northern Canada, adjacent islands, Labrador and New Foundland. This region is introduced by a color layer map which poorly outlines the areas of tundra and cone-bearing trees. But the high quality of the film is immediately recaptured in presenting the winter and summer appearance of the tundra.

The results of hunting and trapping are seen in the pelts at the trading post, while Eskimo skill is portrayed in a beautiful shot of a kayak at sea. Ivory carvings by Eskimos, and Indian wood carvings are emphasized by the question, why?

Lumbering primarily for pulp calls attention to New Foundland. Its fishing is also noted.

Mining centers are quite clearly mapped. But iron mining receives undue emphasis to the exclusion of other minerals. Transportation on lakes and rivers is important, while isolated areas can be reached by air. But the Canadian mounted police who supposedly use cars to serve scattered settlements can scarcely get beyond the fringe of the area or at best only a few miles from the urban centers unconnected by roads.

The winter scene of the Churchill port and elevator are good but the Churchill Hotel picture needs more caption in order not to give the wrong impression.

The significance of the area for world air routes is presented by a clear map and several frames on the airports.

Region of Most People and Southeastern Canada treats the region of most people. It is dominated by many city views, whose industries except for synthetic rubber and iron are inferred. On Toronto's lake front some oil storage is visible. Production of electricity is correlated with paper and pulp, carbide and aluminum manufacturing.

Transportation on canals, and river emphasizes the value of this medium, but

highways and railways are not neglected. There is an excellent view of grain elevators at the water's edge in Quebec.

Agriculture is characterized by fruit, tobacco, dairying, and small scale wheat farms.

Nova Scotia receives good coverage for agriculture, fishing, tourist attractions and its port, Halifax.

In *Southwestern Canada and the Wheat Region* the topography and coastal position of southwestern Canada make a striking contrast to the wheat region. Port facilities and export activities, salmon fishing and lumbering are major ways of making a living. Resorts and sports for summer and winter are shown in the mountains. Level, endless wheat fields are outstanding east of the mountains. Cities and villages are dominated by grain elevators, but stockyards indicate that some grazing is practiced. Coal and oil production and refining of the latter are included. Manufacturing is presented in flour and woolen mills. There are excellent views of the major cities. Grain shipments emphasize the ports of Port Arthur and Churchill.

ANNEMARIE KRAUSE

Southern Illinois University

Ernest L. Thurston and Grace C. Hankins. **Homelands of the World.** Iroquois Publishing Company, Syracuse 2, 1953. 280 pages, 211 pictures (87 colored), 33 maps, Index and A Geography Dictionary. $3.20. A Teacher's Guide $.30.

This is a new text and the introductory volume of the Iroquois Geography Series. It is designed for use in the fourth grade. In the first three chapters the author develops basic concepts and understandings concerning the world as a globe, maps and their uses, and various methods of travel. By employing the familiar device of travel, the child is taken first on a journey across the United States and then to familiar type regions. There is nothing new in the organization of the textual material, but the authors follow the usual pattern for the development of geographic concepts, skills and understandings for the fourth grade. The text can be used with most courses of study.

Among the commendable features of the book, it is well to mention the attractive, durable cover, the selection of good quality, non-glare paper and the size of the print. The selection of pictures illustrate the textual material. All carry captions. The Geography Dictionary is an innovation that will be welcomed by teachers. All words are defined and marked diacritically. Quiz Questions and Suggested Activities are found at the close of each Unit. There is generous use of photographs but one wishes that the colored pictures could be a little more flattering to the people.

To popularize the material in a few places the authors have resorted to the use of some phrases not usually accepted in formal writing. For example, on page 54, Jack, in seeing the Mississippi says, "I always thought it was a whopper." Again on page 98, Joe speaks of a tropical thunderstorm and says, "It looks like the granddaddy of all storms." The following criticism is voiced as the personal opinion of the reviewer who does not like the use of "imaginary lines." In defining parallels of latitude, meridians of longitude, the authors make use of this phrase, which, as a result of long use, may be considered valid.

INA CULLOM ROBERTSON

State Teachers College
Valley City, North Dakota

George L. Proctor, **The Young Traveler in Sweden.** The Young Traveler Series. E. P. Dutton & Co., New York, 1953. $3.00.

This is a story about two youngsters from Texas, who spend a year in Sweden with relatives. During that year they see most of the country, from Lapland in the north to Skåne in the south. The story is, of course, not important in a book of this type. It is there just to give the author an opportunity to tell his young readers about Swedish landscape, people and customs. The two youngsters are keen observers and in their conversation with the relatives, who are with them most of the time, comparisons are made between Swedish and American ways of living. Mr. Proctor has substantial knowledge of both cultures and he tells his story in a simple way without talking down to his readers.

The Young Traveler in Sweden is no substitute for the chapter on Sweden in the geographic textbook with its systematic treatment of the subject, but it offers excellent extra reading for interested pupils. It includes much information which is not primarily geographic, but historic, ethnographic, linguistic, etc.

If all volumes in the series are of the same high quality as the book on Sweden, American school children are to be congratulated. For all those children who do not get an opportunity to travel in foreign lands a book of this type is the best guide during their armchair travelling. For those who have travelled it offers an excellent opportunity of reviving memories.

GUNNAR ALEXANDERSSON, *Visiting Professor*
University of Nebraska

Rutherford G. Montgomery, **White Mountaineer.** Little, Brown and Co., Boston, 1953. 177 pages. $2.75.

White Mountaineer traces the growth of Billy, a Rocky Mountain goat from birth to maturity. The story vividly portrays the rigorous environment of his lofty home. Even more vividly, it portrays weather, other animals and man as constantly threatening enemies. Your respect for this monarch of the heights grows with the gripping suspense of this tale. Grades 7-12.

MARION I. WRIGHT
Rhode Island College of Education
Providence

Richard M. Highsmith, Jr., Ed. **Atlas of the Pacific Northwest—Resources and Development.** J. K. Gill Company, Portland, Oregon, 1953. VII and 117 pages, 72 maps. $1.75.

Oregon State College, with the guidance of the Department of Natural Resources, has in this publication produced the most recent comprehensive atlas of the Pacific Northwest. The atlas represents the work of 23 men from 13 departments in the College. Included in the study area are the states of Washington, Oregon and Idaho, and that portion of Montana west of the Continental Divide.

Professor Highsmith of the Department of Natural Resources, and editor of the atlas, presents the topics in a very logical sequence, opening with a brief "General View of the Pacific Northwest." The resource base follows: "Landforms;" "Climate Controls and Elements;" "Climate Types;" "Water Resources;" "Soil Resources." After a "Land Capability Classification," current land use types are described: "Forest Resources;" "Range Lands;" "Croplands;" "Types of Farming;" "Farm Enterprises." The food-producing resource, "Fishery Resources," is also described. Next is a descrip-

tion of the industrial base ("Mineral Resources," "Electric Power Facilities," "Transportation."), followed by an analysis of the major industries of the Northwest ("Manufacturing Development," "Forest Utilization," "Food Processing," "Primary Metal and Chemical Industries.") Concluding descriptions refer to "Retail and Wholesale Trade," "Recreation Resources" and "Population."

The majority of the maps cover agriculture (24) and industry (17), are black-and-white, and are very legible. Scales range from 1:3,000,000 (double fold-in type) to 1:6,000,000. Principal source materials used in compilation for the maps and text are noted in both. Ring-binder construction and a low price of $1.75 further emphasize this work as an excellent general geographic reference for the Pacific Northwest and as a starting point for more specialized topical research.

HOWARD F. GREGOR

University of Oregon

Howard F. Cline. **The United States and Mexico,** Cambridge, Mass.: Harvard University Press, 1953, 452 pages, $6.00.

The text is divided into four parts. Part I concerns Constants and Variables in which the geography, ancient legacies, modern heritages, the people, and localism and regionalism are described and analyzed. Altho September 16, 1810 is Mexican Independence Day, it was not until the conservative elements decided their main interests would be more secure outside the Empire, that the independence movement succeeded.

Part—Epic Revolution—concerns the period between the Madero Revolt and the Cárdenas upheaval. The revolution was the result solely of the people's hunger—hunger for justice, hunger for bread, for land and for liberty. This period culminated in the dual control by Obregón and Calles, and continued hunger of the people.

Part III—Resurgence and World War II—describes and analyzes the Cárdenas upheaval during which the promises embodied in the Constitution of 1917 went into effect. The period envolves the breaking up of large estates, distribution of the land among the peasants, improved labor and agricultural conditions, and nationalization of the railroads and mineral resources. After 1940, President Camacho slowed down the Revolution and calmed the nation. Mexico moved down the middle road toward democratic ideals. Camacho was able to settle the debt question and re-establish credit. The Industrial Revolution began. The voracious demands of labor were checked; expropriation of going concerns came to an end, and Communist-inspired agitation was stopped. Under Camacho construction of irrigation works, development of the lowlands of the tropical coast and hydro-electric projects were begun, and stabilization of property rights and credit were achieved. Militant agrarianism passed into a technical phase of making the Mexican land feed its people better. Education was taken out of politics and shifted, by law, to the stressing of democracy, nationalism, humanism and the economic independence of Mexico.

Part IV—The Institutional Revolution 1946-1952—covers the period of the presidency of Miguel Alemán and the beginning of that of Adolfo Ruiz Cortines. The improvements started by Camacho were extended and broadened by Alemán. The task of the Revolutionaries henceforth is to make existing institutions work better.

Thirty tables of statistics provided reference material. Mr. Cline's volume is an excellent analysis which could only be composed by one thoroly grounded in the knowledge of Mexican conditions. Any bookshelf that lacks a copy of this book is incomplete.

Duke University BEN F. LEMERT